

Arizona State Retirement System

Investment Program Report

March 16, 2012

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NEPC, LLC



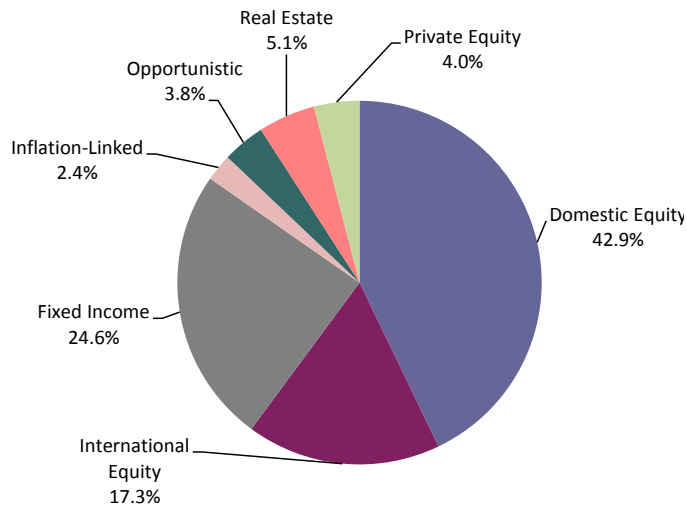
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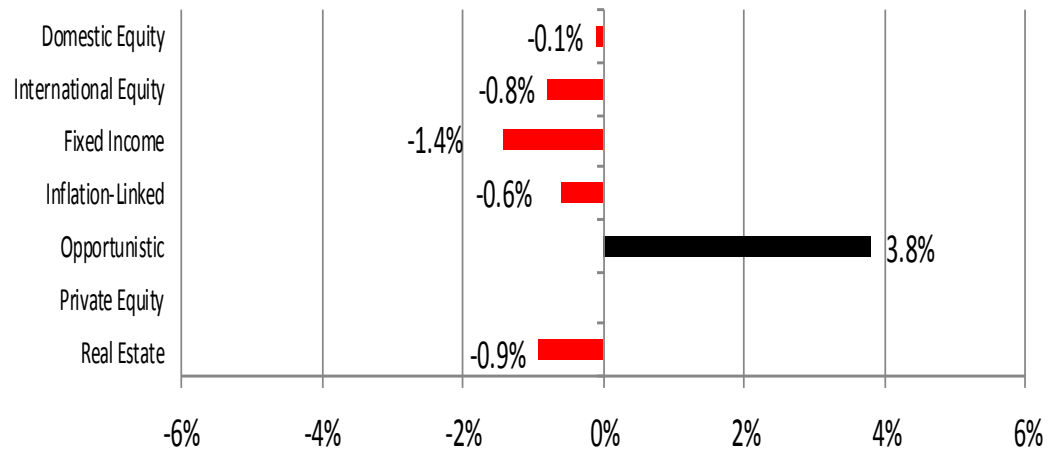
*Evaluation period ending December 31, 2011

Total Fund Asset Allocation

Actual Portfolio – Assumed GTAA Allocation



Actual Portfolio – Assumed GTAA Allocation
vs. Adjusted SAA Policy*




*Private Equity actual weight is equal to policy weight during the implementation of the asset class.

*Over/Under- weights include both GTAA positions as well as IMD tactical considerations.

Note: Opportunistic, Real Estate and Private Equity market values are reported on a quarter-lag and adjusted to include the current quarter's cash flows. Within the Assumed GTAA Allocation vs. Adjusted SAA Policy chart, Private Equity was prorated to domestic equity.

Investment Program Investment Goals

- Macro
- 
- Goal #1: Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.
 - Goal #2: Achieve a total fund rate of return equal to or greater than the strategic asset allocation policy.
 - Goal #3: Achieve a total fund rate of return equal to or greater than the amount projected in the most recent asset allocation study.
 - Goal #4: Achieve asset class net rates of return equal to or greater than their respective broad asset class benchmarks.
 - Goal #5: Achieve portfolio-level net rates of return equal to or greater than their respective portfolio benchmarks.
 - Goal #6: Ensure sufficient monies are available to meet cash flow requirements.
- Micro

Total Fund Performance

- Goal #1: Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.

	20 Year Annualized Return
Total Fund	7.9%
Constant 8%	8.0%
Excess Return	-0.1%

Goal Met: **No**

Total Fund Performance

- Goal #2: Achieve annual and three-year rolling annual rates of return equal to or greater than the return of the Strategic Asset Allocation Policy (SAA Policy)

	Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception (6/30/75)
Total Fund	5.9%	1.0%	12.1%	1.9%	5.0%	9.7%
Interim SAA Policy¹	5.7%	0.3%	11.6%	1.7%	4.7%	9.5%
Excess Return	0.2%	0.7%	0.5%	0.2%	0.3%	0.2%

1 Year Goal Met: Yes
3 Year Goal Met: Yes

Total Fund Attribution Analysis

Total Plan	1 Year	3 Years	5 Years
Allocation Effect ¹	-0.04	-0.12	0.04
Manager Selection Effect ²	0.68	0.65	0.26
Residual ³	0.10	0.02	-0.09
Excess Return	0.74	0.54	0.21

Source: State Street Investment Analytics

¹Contribution due to over/underweights relative to Interim* Strategic Asset Allocation Policy.

²Contribution due to manager selection (net) and interaction effect.

³Contribution due to activities not captured in Allocation and Manager Selection Effects.

*Pro-rates unfunded Private Equity allocation.



Total Fund Attribution Detail

1 Year Excess Return: 0.7%

- Allocation Effect: -0.04%
 - Fixed Income tactical underweight (-0.57%)
 - Mid- and Small Cap Equity tactical overweight (+0.20%)
 - Commodities tactical underweight (+0.15%)
 - Opportunistic tactical overweight (+0.14%)
- Manager Effect: 0.68%
 - Private Equity outperformed due to various managers (+0.61%)
 - GTAA outperformed due to Bridgewater (+0.31%)
 - Mid- and Small Cap Equity underperformed due to Wellington, CRM and DFA (-0.22%)
- Residual: 0.10%

3 Years Excess Return: 0.5%

- Allocation Effect: -0.12%
 - International Equity tactical underweight (-0.26%)
 - Opportunistic tactical overweight (+0.12%)
- Manager Effect: 0.65%
 - Fixed Income outperformed due to F2 and BlackRock portfolios (+0.43%)
 - GTAA outperformed due to Bridgewater (+0.38%)
 - International Equity underperformed due to Brandes and DFA (-0.20%)
- Residual: 0.02%

5 Years Excess Return: 0.2%

- Allocation Effect: 0.04%
 - Fixed Income tactical underweight (-0.12%)
 - Mid- and Small Cap Equity tactical weightings (+0.09%)
 - Opportunistic tactical overweight (+0.05%)
- Manager Effect: 0.26%
 - GTAA outperformed due to Bridgewater (+0.34%)
 - International Equity underperformed due to Brandes and terminated managers (-0.18%)
 - Fixed Income outperformed due to F2 and BlackRock portfolios (+0.11%)
- Residual Effect: -0.09%



Total Fund Performance

- Goal #3: Achieve a five-year rolling annual rate of return equal to or greater than the projected return expectation in the ASRS Asset Allocation Study.

	<u>5 Year Annualized Return</u>
Total Fund	1.9%
AA Expected Return	<u>8.8%</u>
Excess Return	-6.9%

Goal Met: **No**

Asset Class Performance vs. Benchmark

- Goal #4: Achieve annual and three-year rolling annual investment asset class net rates of return equal to or greater than their respective broad asset class

	1 Year Return	3 Year Return
ASRS Domestic Equity	0.8%	15.9%
ASRS Custom Domestic Equity Index ¹	1.4%	15.2%
Excess Return	-0.6%	0.7%
ASRS Int'l Equity	-13.2%	9.2%
ASRS Custom Int'l Equity Index ²	-13.2%	11.3%
Excess Return	0.0%	-2.1%
ASRS Fixed Income	8.0%	8.4%
ASRS Custom Fixed Income Index ³	7.7%	6.9%
Excess Return	0.3%	1.5%
ASRS GTAA	4.9%	15.3%
ASRS Custom GTAA Index ⁴	1.1%	11.3%
Excess Return	3.8%	4.0%
ASRS Inflation-Linked	-8.4%	n/a
ASRS Custom Inflation-Linked Index ⁵	-12.7%	5.7%
Excess Return	4.3%	n/a
ASRS Real Estate	15.1%	-4.2%
NFI - ODCE Index	18.3%	-6.4%
Excess Return	-3.2%	2.2%
ASRS Private Equity	16.2%	3.3%
Russell 2000	-3.5%	-0.4%
Excess Return	19.7%	3.7%
ASRS Opportunistic ⁶	5.1%	13.3%

Goal Met: Partially

¹ASRS Custom Domestic Equity Index was S&P 500 through 12/31/2006; 74% S&P 500, 13% S&P 400, 13% S&P 600 through 12/31/2010; 70% S&P 500, 15% S&P 400 and 15% S&P 600 thereafter.

²ASRS Custom Int'l Equity Index was MSCI EAFE through 9/30/2005; MSCI ACWI ex-U.S. through 12/31/2010; 72% MSCI EAFE, 11% MSCI EAFE Small Cap and 17% MSCI Emerging Markets thereafter.

³ASRS Custom Fixed Income Index was Barclays Capital U.S. Aggregate Index through 12/31/2010; 93% Barclays Capital U.S. Aggregate Index, 7% Barclays Capital U.S. High Yield Bond Index thereafter.

⁴ASRS Custom GTAA Index was 56% S&P 500, 16% MSCI EAFE, 28% Barclays Capital Aggregate through 9/30/2011; 50% S&P 500, 19% MSCI EAFE, 28% Barclays Capital Aggregate, and 3% DJ UBS Commodities Index thereafter.

⁵ASRS Custom Inflation-Linked Index was 100% BC Global Inflation-Linked: U.S. TIPS through 7/31/2010; 50% BC Global Inflation-Linked: U.S. TIPS, 50% DJ UBS Commodities Index through 8/31/2010; 30% BC Global Inflation-Linked: U.S. TIPS, 70% DJ UBS Commodities Index through 5/31/2011; 100% DJ UBS Commodities Index thereafter.

⁶Net absolute rate of return expectations range from 10-14% per annum.

Manager Performance vs. Benchmark

- Goal #5: Achieve annual and three-year rolling annual portfolio level net rates of return equal to or greater than their respective policy benchmarks.

PUBLIC MARKET	1 Year	3 Years
Outperformers #	18	16
Underperformers #	15	6
Outperformers%	55%	73%

PRIVATE MARKET	1 Year	3 Years
Outperformers #	54	27
Underperformers #	24	24
Outperformers%	69%	53%

1 Year Goal Met: Yes

3 Year Goal Met: Yes



Public Markets as of 12/31/2011;
Private Markets as of 9/30/2011 one quarter lagged, consistent with performance reporting

Cash Management

- Goal #6: Ensure all pension benefits, health insurance, member refunds, administrative payments and other requirements are made from available cash balances and without utilizing alternative liquidity options.

Jan-11	\$179,254,003	(\$160,153,928)	\$22,248,491
Feb-11	\$271,309,160	(\$161,014,162)	\$257,687,842
Mar-11	\$198,294,520	(\$161,771,576)	\$31,022,063
Apr-11	\$253,101,693	(\$161,964,540)	\$93,727,361
May-11	\$270,962,645	(\$162,505,428)	\$61,596,976
Jun-11	\$183,731,018	(\$162,908,155)	\$16,564,806
Jul-11	\$178,103,513	(\$165,616,891)	\$14,144,175
Aug-11	\$216,906,967	(\$168,208,098)	\$46,712,381
Sep-11	\$80,352,410	(\$169,518,891)	\$104,897,890
Oct-11	\$256,461,009	(\$170,109,936)	\$73,648,238
Nov-11	\$222,323,321	(\$170,499,953)	\$57,153,006
Dec-11	\$243,931,683	(\$170,410,561)	\$99,650,526

**All Pension Obligations, Capital Calls and Other
Requirements Met with Available Cash**

Goal Met: Yes

Total Fund Performance Comparison*

Independent Consultants Cooperative	1 Year	3 Years	5 Years	10 Years	Since Inception 6/30/75
Master Trust - Total Funds	44	25	53	54	n/a
Total Funds - Public Funds	44	22	47	54	n/a
Total Funds over \$1B - Public	40	24	31	61	n/a
Total Funds - Corporate	47	31	57	61	n/a

Callan Associates Inc.	1 Year	3 Years	5 Years	10 Years	Since Inception 6/30/75
Master Trust - Total Funds	46	19	47	56	43
Total Funds - Public Funds	37	12	38	54	29
Total Funds over \$1B - Public	34	15	34	70	29
Total Funds - Corporate	n/a	n/a	n/a	n/a	n/a

*The information contained herein is for comparison purposes only and is not a Total Fund performance benchmark. Peer universe comparisons are subject to several limitations, including: peer groups are not comprehensive, several funds are included in multiple peer groups, peer groups are constructed using gross of fee returns and survivorship bias in that poorly performing funds may no longer continue to report results.

Note:

- Universes are constructed using gross of fee returns; therefore, the ASRS rank is based on gross of fee returns.
- Independent Consultants Cooperative's ranking not available going back to 1975 as database was created in 1992.
- Callan Associates' ranking for Total Funds - Corporate were not available at the time this report was completed.

Market Environment – Overview

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Equity Benchmarks						
MSCI World	World	7.7%	-5.0%	11.8%	-1.8%	4.2%

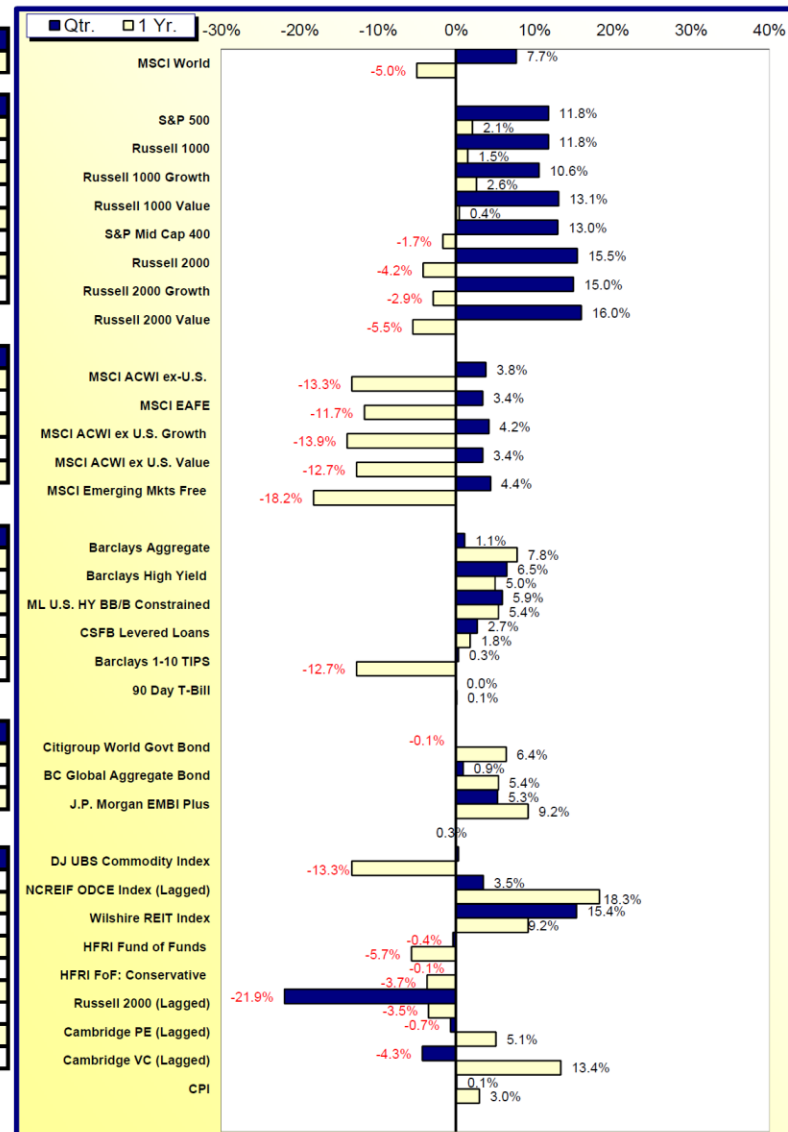
Domestic Equity Benchmarks						
S&P 500	Large Core	11.8%	2.1%	14.1%	-0.3%	2.9%
Russell 1000	Large Core	11.8%	1.5%	14.8%	0.0%	3.3%
Russell 1000 Growth	Large Growth	10.6%	2.6%	18.0%	2.5%	2.6%
Russell 1000 Value	Large Value	13.1%	0.4%	11.5%	-2.6%	3.9%
S&P Mid Cap 400	Mid Core	13.0%	-1.7%	19.6%	3.3%	7.0%
Russell 2000	Small Core	15.5%	-4.2%	15.6%	0.1%	5.6%
Russell 2000 Growth	Small Growth	15.0%	-2.9%	19.0%	2.1%	4.5%
Russell 2000 Value	Small Value	16.0%	-5.5%	12.4%	-1.9%	6.4%

International Equity Benchmarks						
MSCI ACWI ex-U.S.	International	3.8%	-13.3%	11.2%	-2.5%	6.8%
MSCI EAFE	Int'l Developed	3.4%	-11.7%	8.2%	-4.3%	5.1%
MSCI ACWI ex U.S. Growth	Int'l Developed	4.2%	-13.9%	11.2%	-1.8%	5.9%
MSCI ACWI ex U.S. Value	Int'l Developed	3.4%	-12.7%	11.2%	-3.2%	7.5%
MSCI Emerging Mkts Free	Int'l Emerging	4.4%	-18.2%	20.4%	2.7%	14.2%

Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	1.1%	7.8%	6.8%	6.5%	5.8%
Barclays High Yield	High Yield	6.5%	5.0%	24.1%	7.5%	8.9%
ML U.S. HY BB/B Constrained	High Yield	5.9%	5.4%	20.7%	6.8%	7.9%
CSFB Levered Loans	Bank Loans	2.7%	1.8%	17.5%	3.3%	4.7%
Barclays 1-10 TIPS	Inflation-Linked	0.3%	-12.7%	5.7%	5.2%	6.2%
90 Day T-Bill	Cash	0.0%	0.1%	0.1%	1.5%	2.0%

Global Fixed Income Benchmarks						
Citigroup World Govt Bond	Global Bonds	-0.1%	6.4%	4.7%	7.1%	7.8%
BC Global Aggregate Bond	Global Bonds	0.9%	5.4%	5.0%	5.2%	5.0%
J.P. Morgan EMBI Plus	Em. Mkt. Bonds	5.3%	9.2%	15.4%	8.1%	11.6%

Alternative Benchmarks						
DJ UBS Commodity Index	Commodities	0.3%	-13.3%	6.4%	-2.1%	6.6%
NCREIF ODCE Index (Lagged)	Real Estate	3.5%	18.3%	-6.4%	0.0%	5.9%
Wilshire REIT Index	REIT	15.4%	9.2%	21.8%	-2.0%	10.2%
HFRI Fund of Funds	Hedge Funds	-0.4%	-5.7%	3.6%	-0.7%	3.3%
HFRI FoF: Conservative	Hedge Funds	-0.1%	-3.7%	3.5%	-0.9%	2.8%
Russell 2000 (Lagged)	Private Equity	-21.9%	-3.5%	-0.4%	-1.0%	6.1%
Cambridge PE (Lagged)	Private Equity	-0.7%	5.1%	-0.4%	3.7%	-0.4%
Cambridge VC (Lagged)	Venture Capital	-4.3%	13.4%	6.5%	8.6%	12.0%
CPI	Inflation	0.1%	3.0%	2.4%	2.3%	2.5%



Note: Alternative Benchmarks NCREIF ODCE, Russell 2000, Cambridge Private Equity and Cambridge Venture Capital are lagged by one quarter. Performance shown as of September 30, 2011.

Economic Environment

- **Q4 GDP growth increased to 2.8%, up from 1.8% in the third quarter.**
 - Retail sales declined in December 2011 to a 6% year-over-year growth rate.
 - The inventory liquidation process that was a boost to 2009 growth results has worn off, meaning demand must contribute to further growth.
 - Corporate profits as a percent of GDP increased to 13.0% during the fourth quarter, a new secular high.
 - After five months of positive momentum, the U.S. Trade Deficit increased in November.
- **The unemployment rate dropped to its lowest level since early 2009; U-6, a broader measure of unemployment, posted similar results.**
 - JP Morgan states that sustained GDP growth of 1.5% is needed for positive job creation, and closer to 3% growth is needed to decrease the unemployment rate.
- **Consumer confidence dropped in the third quarter, and the Case-Schiller Home Price Index remains more than two times off its high levels.**
- **Capacity Utilization stayed flat in December at relatively low levels, while CPI fell to 3.0%.**
- **Fed Funds rate remains at 0.25% while the 10-year Treasury Yield finished the year at 1.9%.**
- **The Fed balance sheet increased assets in December as it provided liquidity to central banks.**
- **Many developed nations are at or approaching unsustainable debt levels.**
 - Peripheral Europe credit default swap spreads have widened dramatically over the last 18 months, indicating increased investor concern about the possibility of default.

Market Environment

Equities

- **Global equity markets posted positive results in the fourth quarter, ending another volatile year in which macro headlines overshadowed company fundamentals.**
- **Domestic Equity (S&P 500) outperformed International Equity (MSCI ACWI ex-U.S.) in the fourth quarter (+8.0%).**
 - U.S. investors responded favorably to improvements in economic data as indicators provided support for moderate U.S. GDP growth.
 - More cyclically sensitive sectors (energy, industrials, materials) outperformed their defensive counterparts (utilities, telecommunications, staples). Small caps beat mid caps, which, in turn, outpaced large caps. Value outperformed Growth across the board.
 - Non-U.S. markets trailed U.S. markets in both dollar and local terms during the quarter as the European debt crisis and inflationary pressures in China contributed to elevated volatility. Emerging markets outperformed developed markets (+0.9%).

Fixed Income

- **Overall, the profile of the Treasury yield curve ended the year much flatter, particularly on the longer end, as yields declined over the summer. At year-end, two-year Treasuries were yielding 0.25%, 10-year Treasuries were yielding 1.9%, and 30-year Treasuries were yielding 2.9%.**
- **U.S. high-grade credit led investment grade sectors during the fourth quarter, followed by agency MBS.**
- **Riskier segments of the fixed income markets seemed to shrug off persistent concerns over the still unsettled problems brewing in the Eurozone, providing fuel for the rally during the quarter. U.S. high yield and hard currency emerging markets debt were among the best performing sectors.**

Market Environment (Continued)

Private Equity

- **In the face of economic uncertainty and a likely slow recovery environment in Europe and the U.S., distressed, mezzanine, and secondary funds continue to provide attractive investment options for investors to take advantage of illiquidity pressures, balance sheet restructurings and continued financial underperformance among corporations and financial institutions.**

Real Estate

- **Core real estate rebounded significantly in 2011 while non-core distressed properties continued to lag. U.S. property fundamentals improved moderately, with occupancies and new rental rates generally increasing relative to 2010 but new development remaining at an all time low.**
 - Within core markets, cap rates and property values have been approaching peak values, and average income yields remain strong relative to high grade fixed income investments.

Commodities

- **The Dow Jones UBS Commodity Index (DJ-UBS) posted a negative calendar year return (-13.3%) in 2011.**
 - During 2011 and in Q4 specifically, there was a large divergence of returns between the Goldman Sachs Commodity Index (GSCI) and the DJ-UBS, which returned 9.0% and 0.4%, respectively.
 - The GSCI benefitted from a significantly higher weight to energy, as that part of the commodities market experienced gains. In precious metals, gold sold off roughly 4% for the quarter but was up strongly for the year, marking the commodity's 11th consecutive positive year.

NEPC 2012 Capital Market Observations

- **Low expected returns are here to stay – fundamental economic drivers remain depressed**
 - Developed world seeking to avoid rapid deleveraging by accepting slower growth.
 - Lower 30-year yields extend unattractive bond returns to the long-term.
- **Uncertainty around ultimate fate of Euro prolongs volatility and macro-driven markets**
 - Limited political will worldwide to recognize losses.
 - Official U.S. recession (two negative quarters) is unlikely due to potential fiscal and monetary intervention.
- **Despite poor growth prospects, risky assets have some upside**
 - Corporate balance sheets are strong and valuations are modestly attractive.
 - Central bank stimulus unlikely to create jobs but can drive the stock market up.
 - Credit markets have more attractive risk-adjusted return expectations than equities – should protect better in downturn and have better risk adjusted returns in market rally.
- **Worldwide recovery, though unlikely, could spark inflation**
 - Real assets provide protection, but otherwise have low return prospects.
 - Still play an important strategic role in portfolios, but less attractive on a tactical basis.
- **Global economic leadership expected from emerging countries**
 - Higher relative investment performance expected as part of this transition.
 - Owners of “stuff people want” and increasingly home of “people wanting stuff”.

NEPC 2012 General Actions for Clients

- **Recognize that current global deleveraging is a multi-year event**
 - Expect many themes to be repeated and reinforced for several years.
 - Ongoing commitment and patience required to capture returns.
- **If appropriate, increase portfolio risk – and expected return**
 - Seek higher risk premia, balanced across asset classes, factors, and strategies.
 - Broad-based credit markets are best positioned for volatility.
 - Review risk management processes – consider engaging an overlay manager.
 - Explore hedging a portion of developed country currency exposure.
- **Continue to increase emerging markets exposure**
 - Typical U.S. institutional allocation still under market-capitalization weighting.
 - While potential for slowdown has increased, long-term structural themes for outperformance remain in place across equity, debt, and currencies.
- **Use active strategies to enhance returns**
 - Recognize challenges that active managers have faced with macro-driven markets and have patience where conviction remains strong.
 - Set reasonable expectations and evaluate manager's role in total portfolio structure.
- **"Buy Low" in segments of illiquid and less liquid assets**
 - Distressed strategies provide access to multiple phases of credit restructuring.
 - Structured securities offer attractive expected returns.
 - Accessed in both hedge fund and private structures.

2012 Focused Actions for Public Funds

- **Portfolio Risk Management**

- Enhanced Return and Risk targets should be thoughtfully implemented and managed.
- Asset Allocation Studies with increases to Portfolio Risk need to be conducted with an eye on potential market scenarios and an understanding of the downside.
- Increases to Illiquid Assets (including Private Equity, Real Estate, and Hedged Strategies) needs to be measured against total portfolio Liquidity Needs and Constraints.

- **Real Asset Considerations**

- Many public funds have cost of living adjustment mechanisms.
- While many inflation protection classes come with subdued return forecasts and appear overpriced, some exposure can mitigate unexpected inflation pressures.

- **Invest for the Long Term**

- Short to medium-term return assumptions are still subdued.
- Low yields have also dampened long-term expected returns.
- 5-7 Year expected target returns will struggle to meet actuarial targets but normalized expectations (long-term), while low, will improve chances of earning actuarial targets.

IMD Investment House Views

- **U.S. Equities**

- U.S. stocks continue advancing off of October lows as the markets gain some measure of confidence and have, for the time being at least, put aside the pacing concerns of 2011. Guarded optimism over progress on Eurozone sovereign solvency has helped. The uncertainty hastened by the ramifications of these issues resulted in equity market valuations that, despite the latest move, are reasonable compared to other asset classes.
- The U.S. macroeconomic outlook has stabilized and along with it, so have other underpinnings to markets such as subsiding index volatility, a softening in the cost of put options and an earnings reporting season that is within expectations. Though threats to the markets' new-found confidence still loom, fundamentals remain sufficient to support an upward price bias in U.S. equities.
- IMD has a tactical bias to large-cap and greater emphasis on U.S. Equities relative to Non-U.S. Developed-Markets (EAFE) Equities.

- **International Equities**

- Financial markets continue to be driven primarily by swings in sentiment about solvency issues of Eurozone sovereigns. The increasing flow of persistently negative media news throughout 2011 kept the capital markets on edge, which in mass stepped away from perceived risk with a vengeance.
- Global equity markets experienced the worst quarterly drop since 4Q2008 over the summer and the sixth largest quarterly decline in past thirty years, before finally reaching some relative stability late in the year. Implementation risks remain, but the markets now sense some degree of containment of the crises among Eurozone sovereigns; more concrete solutions will restore confidence further.
- 2011's market decline priced in a 25% contraction in global earnings, the kind of retrenchment usually associated with a "normal" recession. That appears overdone after taking into account the slowing, and except for Southern Europe, the not yet recessionary pace likely for overall global economic growth. Economists cut global GDP growth forecasts to about 2.9% for 2012, still above the 2.0% level commonly associated with world recession and much higher than the -2.0% rate suffered in 2009. Thus global earnings growth will no doubt slow, but not decline, during 2012. As markets refocus on these more positive aspects, the values of global equities can work higher. In that context, growth themes surface as desirable characteristics, both within the developed economies markets and across the emerging markets.
- IMD has maintained the Non-U.S. Equities class at approximately equal weight to SAA policy since 2010, but in 4Q2011 reallocated 1.5% (TF) within the class from the EAFE subclasses to Emerging Markets (EM) beta and active strategies. The resulting 1.5% (TF) EM overweight to vs. SAA policy reflects IMD's objective for a proportionally larger strategic allocation to EM.

IMD Investment House Views

- **Fixed Income**

- With the recent improvement in the outlook for both the economy and the sovereign debt crisis, we are more optimistic about the prospects for riskier asset classes of fixed income particularly as credit spreads are at attractive levels.
- In December, IMD moved from a 1% tactical underweight in high yield bonds back to its 2% policy target. IMD is less optimistic about the intermediate outlook for core fixed income due to the current low levels of treasury rates.

- **Private Equity**

- IMD favors managers focused on mid-market and smaller target companies where multiples continue to be attractive and there is less competition from public debt and equity alternatives; as well as on managers with strong operational skill sets to help target companies grow EBITDA; and has tactically focused on managers with distressed and turnaround skill sets that enable them to capitalize on a deleveraging environment.
- IMD believes in the long term prospects of the natural resources sector and will continue to make investments in this area, as well as considering a tactical increase in focus on secondary funds and potential new initiatives in infrastructure and emerging markets.

- **Real Estate**

- Real Estate is benefitting from a gradually improving economy. Apartments and hotels are seeing demand return to pre-crash levels. Office and industrial properties have a positive trend in occupancy, but vacancy rates in many markets are still too high for landlords to have pricing power. Retail is still at record vacancy levels even in an environment where consumer spending is improving, reflecting structural changes in the retail market. For sale housing remains challenged, although public market activity may reflect optimism of a recovery.
- Continuing dislocations in the debt market present both challenges and opportunities as debtors and creditors continue to work through the necessary process of resolution.

IMD Investment House Views

- **Commodities**

- Recent more positive economic data provides growing evidence of a stabilizing (and possibly strengthening) domestic economy and as a result, IMD has initiated a move back to policy target weight. Additional factors that support this move include the January 2012 Fed announcement of its intention to keep short interest rates on hold until late 2014, the fact that Europe looks to be working its way toward a resolution on its debt crisis and the belief that China will successfully navigate a 'soft' landing.
- The European debt crisis continues to have implications for the USD and global growth while geopolitical factors provide uncertainty on the supply side. Long-term, the thesis for the asset class will be driven by emerging market demand, supply concerns (export restrictions, weather related, legislative, etc.), Fed policy/weak USD, and institutional acceptance of commodities as an asset class.

- **Opportunistic**

- IMD maintains its select structured credit and distressed investments made primarily through ASRS opportunistic public fixed income investment managers (separate accounts and GP/LP structures). Opportunistic Private Investments have a policy allocation of 0-3% which resides within ASRS 0-10% SAA aggregate opportunistic investment policy.
- Initial allocations in the private opportunistic space have focused on direct lending. IMD is exploring relationships with regional real estate operators for additional private opportunistic investments, co-investments with existing partners and potential investments that seek to capitalize on dislocations in the residential market.

IMD's Recent Activities and Initiatives

- **Total Fund Portfolio Repositioning**
 - Reduced Commodities Allocation
 - Increased Allocation to Existing EM Managers
 - Reduced Bank Loan mandate in favor of High Yield Allocation
- **Asset Allocation Study Planning**

Appendix

Strategic Asset Allocation (SAA) Policy History

- 7/1/75 – 12/31/79 – 40% S&P 500/60% Barclays Capital Aggregate
- 1/1/80 – 12/31/83 – 50% S&P 500/50% Barclays Capital Aggregate
- 1/1/84 – 12/31/91 – 60% S&P 500/40% Barclays Capital Aggregate
- 1/1/92 – 12/31/94 – 50% S&P 500/40% Barclays Capital Aggregate/10% MSCI EAFE
- 1/1/95 – 6/30/97 – 45% S&P 500/40% Barclays Capital Aggregate/15% MSCI EAFE
- 7/1/97 – 12/31/99 – 50% S&P 500/35% Barclays Capital Aggregate/15% MSCI EAFE
- 1/1/00 – 9/30/03 – 53% S&P 500/30% Barclays Capital Aggregate/17% MSCI EAFE
- 10/1/03 – 12/31/06 – 53% S&P 500/26% Barclays Capital Aggregate/15% MSCI EAFE/ACWI ex-U.S.¹/6% NCREIF ODCE (lagged one quarter)
- 1/1/07 – 10/31/2009 – 31% S&P 500/7% S&P 400/7% S&P 600/26% Barclays Capital Aggregate/18% MSCI ACWI ex-U.S./6% NCREIF ODCE (lagged one quarter)/5% Russell 2000 (lagged one quarter)
- 11/1/2009 – present – 28% S&P 500/6% S&P 400/6% S&P 600/24% Barclays Capital Aggregate/2% Barclays Capital High Yield/13% MSCI EAFE/2% MSCI EAFE Small Cap/3% MSCI Emerging Markets/6% NCREIF ODCE (lagged one quarter)/7% Russell 2000 (lagged one quarter)/3% Dow Jones/UBS Commodities Index
- *Interim SAA Policy: 31% S&P 500, 6% S&P 400, 6% S&P 600, 13% MSCI EAFE, 2% MSCI EAFE Small Cap, 3% MSCI Emerging Markets, 24% Barclays Capital Aggregate, 2% Barclays Capital High Yield, 6% NCREIF ODCE (lagged one quarter), 4% Russell 2000 (lagged one quarter), 3% Dow Jones/UBS Commodities Index
- Note: Interim SAA Policy includes a proration of 3% Private Equity, which is unfunded. Private Equity was prorated to domestic equity.